XXVI. *An Account of Rhizomorpha medullaris, a new British Fungus. By Sir James Edward Smith, M.D. F.R.S. P.L.S.*

Read June 17, 1817.

This, which appears to be a nondescript species of *Rhizomorpha*, was communicated to me by Mr. Francis Boott, an American botanist, who met with it during his visit to Derby, in the course of last spring. It was first observed, many months before, by Mr. Bainbrigge, house-surgeon to the Derby Infirmary, and seems to have excited attention as a troublesome intruder into the reservoir destined to supply the baths. That gentleman thus describes the appearance and situation of the fungus in question.

"The reservoir in which it was found is a kind of circular cellar, with an opening at the top. It is situated in the shrubbery, and contains water to supply the baths, which is conveyed by leaden pipes. As the water is sent by a forcing-pump, a piece of timber was fixed across the upper part, to support a perpendicular pipe that admitted the water. From this timber, which was deal, and not in the least decayed, the plant hung, and as the depth of the water varied, a greater or less quantity floated on the surface. I believe the whole of it would be seldom immersed; but the wood, and every part of the plant, would be always wet, in consequence of the water going in with considerable force. I saw the joiner measure the fungus immediately on our getting it out, and he says the length was 12 feet. This I have quite forgotten, but

but am inclined to think him mistaken. The plant had a beautiful appearance in the water, from the fibres diverging in every direction, and its whiteness, which was lost when it became dry. The extremities were peculiarly brittle. Even the agitation of the water broke off large quantities. This produced great inconvenience, and several attempts were made to destroy the plant, by clearing it away; which not succeeding, the timber was, at length, removed. Oak has been substituted, smeared with tar, pitch and tallow, which has hitherto had the desired effect. The old beam has been used for other purposes."—Such is Mr. Bainbrigge's very accurate account. Mrs. Hardcastle of Derby, to whom I am indebted for the drawings now laid before the Linnæan Society, regrets that she only heard of this curious vegetable production by accident, after it had lain by ten months in a dry state. Her drawing therefore represents this state only, and is here accompanied by a very small portion of the original specimen. This, in its brown and shrivelled appearance, much resembles the roots of willows or poplars, such as often find their way under ground into some adjacent river, or water-course. These have often been brought for my inspection, and I must confess they have led me to doubt the existence of some reputed *Rhizomorphæ*; but I shall in future be more precise in my examinations, lest I should inadvertently confound with them any genuine fungus. That the present is really of the latter description, appears from its history, as well as from the texture of the dried plant, whose internal substance does not, like a root, consist of concentric circles, but of an uniform congeries of longitudinal parallel tubes, in the dried specimen at least, of a yellowish colour. There is nothing like a central pith. And yet the brown external coat, though not separable like the bark of a root, bears so great a resemblance to that part, as almost to stagger my

 opinion.

opinion. The taste of the dried plant has nothing of a fungus-like flavour, but in its slight astringency agrees with many, almost tasteless, roots. The above history of the origin of the plant, from a piece of wrought wood, and its copious growth, must preclude all idea of its being any thing else than a parasitical fungus.

The specific character may thus be given:

Rhizomorpha, *medullaris*, teres ramosissima nivea; intùs cellulosa flavescens.

REFERENCE TO PLATE XX.

Fig. 1. A portion of the stem of *Rhizomorpha medullaris.*
2. Termination of a principal branch.
3. A transverse section of the stem magnified.

London,
June 12, 1817.

J. E. Smith.

XXVII. *A Cen-*